



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/915,622

07/26/2001

Mototsugu Abe

09792909-5145

6466

26263

7590

12/03/2003

SONNENSCHN NATH & ROSENTHAL LLP  
P.O. BOX 061080  
WACKER DRIVE STATION, SEARS TOWER  
CHICAGO, IL 60606-1080

EXAMINER

CHEN, CHONGSHAN

ART UNIT

PAPER NUMBER

2172

DATE MAILED: 12/03/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/915,622

Applicant(s)

ABE ET AL.

Examiner

Chongshan Chen

Art Unit

2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) Z.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 1-8 are pending in this Office Action.

#### ***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Information Disclosure Statement***

3. The reference cited in the IDS, PTO-1449, Paper No. 7, has been considered.

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1 and 4-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Tanaka (6,519,360).

As per claim 1, Tanaka teaches an information providing apparatus comprising:

storage means for storing information, relevant information which is relevant to the information, and features of the information for each category of the information (Tanaka, Fig. 1, element 107, image database, Fig. 3 & 5A, col. 2, lines 10-20);

Art Unit: 2172

acquiring means for acquiring information to be searched for (Tanaka, Fig. 1, element 101, input section, 105, comparison and search controller);

determining means for determining a category to which the information acquired by said acquiring means belongs (Tanaka, col. 2, lines 13-17);

extracting means for extracting features of the information acquired by said acquiring means (Tanaka, Fig. 7, element 23, color feature extraction);

comparing means for comparing the features of the information which belongs to the category determined by said determining means with the features extracted by said extracting means, the former features being stored in said storage means (Tanaka, Fig. 7, element 24, color feature comparison & search); and

searching means for searching for the target relevant information stored in said storage means based on the result of the comparison performed by said comparing means (Tanaka, Fig. 1, element 105, comparison and search controller).

Claims 4-5 are rejected on grounds corresponding to the reasons given above for claim 1.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka (6,519,360) in view of Legh-Smith et al. ("Legh-Smith", 6,178,419).

Art Unit: 2172

As per claim 2, Tanaka teaches all the claimed subject matters as discussed in claim 1, except for explicitly disclosing the category has a hierarchical structure. Legh-Smith teaches the category has a hierarchical structure (Legh-Smith, col. 1, lines 35-42). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a hierarchical structure for the category in the system of Tanaka because it is easier to find information in a category directory since the choices are constrained by the known topic area categories.

8. Claims 3 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka (6,519,360) in view of Sugahara et al. ("Sugahara", 6,636,617).

As per claim 3, Tanaka teaches all the claimed subject matters as discussed in claim 1, except for explicitly disclosing determining the category based on a digital watermark, the digital watermark being inserted in the information acquired by said acquiring means. Sugahara teaches determining the category based on a digital watermark, the digital watermark being inserted in the information acquired by said acquiring means (Sugahara, col. 9, lines 40-43). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to insert a digital watermark in the information in the system of Tanaka because watermark is preferably transparent, in the sense it would not interfere with the acquired information. Furthermore, it is preferably robust, in the sense that it is hard to remove or forge, and also is preferably detectable, in the sense that it should be easy to extract from the acquired information.

As per claim 6, Tanaka teaches an information providing apparatus comprising:

acquiring means for acquiring information to be stored (Tanaka, Fig. 1, element 101);

Art Unit: 2172

determining means for determining a category to which the information acquired by said acquiring means belongs (Tanaka, col. 2, lines 21-38);

storage means for storing the information (Tanaka, Fig. 1, element 107, Fig. 2); and

delivery means for delivering the information stored in said storage means via a network (Tanaka, Fig. 2, element 2 & 7).

Tanaka does not explicitly disclose inserting means for inserting a digital watermark in the information acquired by said acquiring means, the digital watermark corresponding to the category determined by said determining means. Sugahara teaches inserting a digital watermark in the acquired information (Sugahara, col. 1, lines 63-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to insert a digital watermark in the information in the system of Tanaka because watermark is preferably transparent, in the sense it would not interfere with the acquired information. Furthermore, it is preferably robust, in the sense that it is hard to remove or forge, and also is preferably detectable, in the sense that it should be easy to extract from the acquired information.

Claims 7-8 are rejected on grounds corresponding to the reasons given above for claim 6.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chongshan Chen whose telephone number is 703-305-8319. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

Art Unit: 2172

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on (703)305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

November 25, 2003



SHAHID ALAM  
PRIMARY EXAMINER